# COAL'S CLEAN IMAGE: COAL HANDLING FACILITIES – A VIDEO PRESENTATION

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Mr Karas joined the Australian Public Service in 1980 having completed an honours degree in economics at the University of Western Australia. His first appointment was to the Australian Treasury where he worked on economic and financial issues associated with Australia's international aid program.

In 1983 he moved to the mineral resources area of the former Department of Primary Industries and Energy. In the period to 1990 he provided economic and policy advice on a range of resource industries including diamonds, base metals, aluminium and uranium.

He took up a position in the Department's central policy area in 1990 where he participated in the formulation of a national sustainable development strategy leading up to the first UN Conference on the Environment.

Since mid 1992, apart from a short period in the greenhouse policy unit, he has been working in the coal policy area of the Department. This area, together with other energy and resource functions, moved to the Department of Industry Science and Resources in 1999.

Mr Karas' work on coal has involved the full range of domestic and international issues associated with providing coal and energy policy advice to the Australian Government. He has been closely involved in the development of APEC coal activities and the strengthening of bilateral cooperation on coal between Australia and many countries throughout the region.

Mr Karas is married and has two school age children. His interests include gardening, wood working and photography.

*'CLEAN COAL HANDLING FACILITIES'*

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## Introduction

The image of coal is probably the most significant challenge facing the coal industry. The impact of public perceptions and community attitudes to coal use should not be ignored or underestimated.

Expanding coal use will continue to be in the public spot light. People will be closely monitoring environmental performance and be prepared to use any oversights in the fight against coal.

Project planning must take full account of the environment. The technology and expertise is available to minimise environmental impacts - these need to be built into low cost environmental solutions.

But it is not just a case of using the right technology - it is also important to let others know the achievements being made in using coal cleanly and efficiently. Community involvement is absolutely essential in all stages of a coal fired power project - from the planning through to implementation and ongoing feedback.

This all sounds very simple in theory. In practice we all have a lot to learn - whether it be from our mistakes or the good experience of others. The sharing of knowledge and technical cooperation are essential.

I look to forums such as this APEC forum which brings together leaders from industry and government throughout APEC to consider the issues for tackling coal's poor image.

It is my aim today, to illustrate to you through a short video presentation clean coal handling facilities at power stations and ports. This video was prepared for the Second APEC Coal TILF Workshop held in the Philippines in March 1998. The message running through this video on the need to protect the natural environment and keep the local community informed and involved in decisions which may affect them, still remains relevant today.

The video displays clean coal handling facilities at the Eraring power station in the Hunter Valley in Australia and coal handling facilities at the Takehara No.3 Unit in Japan.

## Clean Coal Handling Facilities at Power Stations

As the video illustrates, the Eraring Power station is located in close proximity to ocean beaches, Lake Macquarie and the local community. This is a large 2400MW power station, using 5 mtpa of coal.

Good planning, public consultation and communication with the local community means that the power station, community and wildlife all co-exist.

Technology and raw material at Eraring were carefully selected to prevent pollution and environmental impact. Eraring installed state of art fabric filters to capture ash emissions. This filter system works like a giant vacuum cleaner trapping 99.98% of all fly ash. This leaves an invisible .02% to be omitted via the stack. Visitors to the power station often ask if it is operating because they can't see any smoke. Only the occasionally release of excess steam from power station boilers demonstrate it is operating at full capacity around the clock.

These standards are far in excess of legal requirements - but in terms of community acceptance are well worth the extra effort.

To foster a close relationship with the community, visitors are given an opportunity to know first-hand how it operates and the technology employed at each process. This ensures that the public know the station is safe and the care that is being taken to protect the environment. There are over 6000 visitors to Eraring per year.

The coal unloading and handling facilities at the EPDC's Takehara No.3 coal fired power plant in Japan displayed a completely enclosed conveyor belt to move the coal from unloader to the indoor coal yard. Dust emissions from the ship unloader were minimised by operating practices for the grabber. You may have noticed that the grabber was fully closed before leaving the ship hold. Effective use of water spraying also captures coal dust when the grabber released its loads. These are simple and cost effective solutions that only require careful planning and operating practices.

**Conclusion**

Planning is the key to ensure coal-fired power stations can co-exist in a clean environment. The power station must blend in with the local environment and wildlife, have buffers from the local community to ensure noise is low and visual impact is minimal.

Appropriate clean handling facilities must be installed to ensure clean air, clean water and dust control. All of the facilities should be regularly monitored. Tree planting programs can enhance the appearance of power stations. Public visits and community open days should be encouraged to allow the public to see the many environmental management features for themselves.